Serial No.: 10/087,737

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Reply to the Office Action of April 22, 2003

## IN THE CLAIMS

Claim 1 (Currently Amended) A build-up mold for continuous casting comprising:

having a cooling plate having a back surface with a plurality of slit grooves for passing a cooling fluid, each one of said plurality of slit grooves having a depth and a width;

a supporting panel configured to cover said plurality of slit grooves so as to form a plurality of cooling channels; and

at least one tightening member for attaching said supporting panel to said back surface,

wherein each one of said cooling channels is separate, distinct, and unconnected from, and has substantially the same depth as, the other cooling channels, and said width varies based on a localized cooling requirement for said tightening member. mounted, via tightening members, at the open side of the slit grooves, which become flow passes of cooling water, of the cooling plate in which a number of slit grooves are formed in the casting direction; wherein the widths of said slit grooves disposed so as to bypass in the vicinity of said tightening members is formed to be larger than the widths of the slit grooves disposed in a zone having high cooling efficiency between said tightening members, and the depths of said slit grooves are formed to be roughly equivalent to each other.

Claim 2 (Currently Amended) The build-up mold for continuous casting as set forth in Claim 1, wherein the a ratio (a/b) of the a maximum value (a) of said

widths width of said respective slit grooves in said cooling plate to the a minimum value (b) thereof is between 1.1 and 4.

Claim 3 (Currently Amended) The build-up mold for continuous casting as set forth in Claim 1 or 2, wherein a pattern of said <u>plurality of slit grooves disposed on said cooling plate</u> is formed to be roughly symmetrical at the left and right sides with respect to the <u>a</u> centerline <u>of said cooling plate</u> in the casting direction.

Claim 4 (Currently Amended) The build-up mold for continuous casting as set forth in any one of Claims 1 or 2-through 3, wherein each one of said plurality of slit grooves is disposed on at said cooling plate in a wave pattern are of a slalom type that is formed so as to have a plurality of portions having an appointed a curvature, wherein and the widths width of a slit grooves groove having a large curvature is formed to be larger than the widths width of a slit grooves groove having a small curvature.

Claim 5 (Currently Amended) The build-up mold for continuous casting as set forth in any one of Claims 1 or 2-through 4, wherein respective slit grooves of said cooling plate are formed so as to have an appointed width, and a velocity and/or a pressure loss drop of said cooling water-fluid in one of said cooling channel is substantially the same as the velocity and/or the pressure drop in the other cooling channels for a given overall that is provided into said slit grooves at an appointed pressure drop in said build-up mold-level are made roughly equivalent to each other.